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## ABSTRACT

MONIFORMS are partially completed coding formats in the TUTOR language used to create frequently used question types such as multiple choice, matching, and constructed response questions. The author adds information related to specific questions and responses, using one of several options available for tailoring a question to meet specific requirements. Practice questions for teaching rather than testing provide the students with immediate feedback in either general form or response-specific form. There are six steps in preparing MONIFORMS: selection, documentation, unit setups, revision of setups, revision of MONIFORMS, and the trial run. Many sample MONIFORMS, completed MONIFORMS, and uncompleted MONIFORMS are included as examples. This programed text provides instructions in completion of MONIFORM coding and debugging. (CH)

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# LESSON MONIFORM

## An Authoring Aid for the PLATO IV CAI System

by

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April 1975

Work Unit: CATALIST

Prepared for

U.S. Army Research Institute for the Behavioral  
and Social Sciences  
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## FOREWORD

This text is a programmed guide for the use of HumRRO-developed authoring aids for the PLATO IV Computer-Administered Instruction (CAI) system. These authoring aids, which we call Monitoring Formats (MONIFORMS), may be used by any individual who is preparing instructional material for the PLATO IV system.

MONIFORMS represent partially completed code in the TUTOR programming language and are used to create certain frequently used question types, such as multiple choice, constructed response, and matching questions. MONIFORMS require the author to provide only information relevant to his specific question, such as the text for the question, feedback messages for correct and incorrect responses, and instructions for analyzing the student's response.

A user of MONIFORMS need not be skilled in the TUTOR programming language. He need know only basic editing procedures for the PLATO system. In addition, question preparation time is greatly reduced; any question prepared with MONIFORMS can be completed within 10-15 minutes.

This text contains only guidance for question preparation using MONIFORMS. Individuals interested in the rationale and development process of MONIFORMS are referred to a companion document (HumRRO report in preparation); "MONIFORMS as Authoring Aids for the PLATO IV CAI System." The material in this guide is also available in CAI form on the PLATO IV system in Lesson "moniform."

Appreciation is expressed for the assistance provided by HumRRO researchers Dr. Harold Wagner, Nancy Hibbits, Patricia Hasty, and SP/4 John Volk (discharged). Appreciation is also extended to individuals at the University of Illinois Computer-Based Educational Research Laboratory, and especially to H.A. Himwich of that organization who has provided invaluable assistance in the development of individual MONIFORMS.

The work was performed at HumRRO Eastern Division, Alexandria, Virginia, under Work Unit CATALIST. Dr. J. Daniel Lyons is Director of the Division and Dr. Robert J. Seidel is Program Director, Instructional Technology Group.

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## **LESSON MONIFORM**

The material in this lesson is part of research conducted by the Instructional Technology Group of the Human Resources Research Organization (HumRRO) under contract with the U.S. Army Research Institute for the Behavioral and Social Sciences.

The purpose of this research is to develop authoring aids that will be useful to all PLATO IV users. Such authoring aids are referred to as MONIFORMS.

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Lesson MONIFORM has been designed to give you considerable freedom in branching through the several segments of the lesson. That is, you need access only those parts of the lesson that you wish.

**THE MAIN INDEX IS THE LAST PAGE OF THIS DOCUMENT.**

**For your convenience the Main Index can be folded out from the report in a manner that permits you to see it at all times and refer to it as you work with the lessons.**

## **Introduction to MONIFORMS**

## **INTRODUCTION TO MONIFORMS**

This introduction to MONIFORMS is prerequisite to an understanding of the use of MONIFORMS and the remainder of the lesson. It should take you 10-15 minutes to complete.

You will be told what MONIFORMS are (and what they are not) and will be shown one sample question and the MCNIFORM used for preparing that question.

Lesson "moniform" is a series of lessons designed to permit you to rapidly find specific information concerning HumRRO MONIFORMS. Use it somewhat like you would use Lesson AIDS.



**You are not expected to take the time now to go through the entire series of lessons. However, you should complete the Introduction and then spend a few minutes browsing through the Main Index to become familiar with the general structure of the lessons and the types of information available to you.**

The term MONIFORM is an acronym for MONItoring  
FORMats.

**In general, MONIFORMS are partially completed coding formats. You, the author, add information related to your question and specifications for response analysis.**

**MONIFORMS will permit you to rapidly and easily create certain types of practice problems.**

**After you become familiar with using MONIFORMS,  
you will be able to code your questions in  
10 minutes or less.**

**Practice questions are defined as those types of questions which are intended to TEACH as opposed to testing types of questions which primarily try to EVALUATE a student's present knowledge.**

Practice questions prepared with MONIFORMS permit the author to provide the student immediate feedback depending upon the student's response. That is, the author may provide a congratulatory message for a correct response, or provide messages to lead the student toward the correct answer.

MONIFORMS are used to create single questions.  
This therefore means that the author may intermingle  
questions prepared with MONIFORMS with those prepared  
by other means, such as coding from scratch. As a  
consequence, use of MONIFORMS in no way dictates the  
overall structure of the author's lesson.



MONIFORMS require the user to understand only basic editing commands. They are especially useful for individuals who have limited TUTOR programming skills.

They are also useful to the more experienced TUTOR programmer because they greatly reduce the amount of time required for preparing certain frequently used types of questions and associated response analyses. Since MONIFORMS make use of HumRRO programs which need not be copied into your lesson, they are economical in terms of lesson space.

Let's now look at a matching type question that was prepared using a MONIFORM.

By using the MONIFORM, this question was prepared in less than 7 minutes. You can judge for yourself how long it would take to code it from scratch.

To fully appreciate how this question is executed, you will need to sign into Lesson MONIFORM. If you were signed into the lesson, the question would appear as it is reproduced on the following page. Also on-line, you would be able to move the arrow up and down with the NEXT and BACK keys. This feature allows you to temporarily skip specific parts of the question, and then to return to them later.

Match the number of players for each of the sports listed below:

- |   |               |           |
|---|---------------|-----------|
| ➤ | 1. basketball | a. eleven |
|   | 2. football   | b. nine   |
|   | 3. hockey     | c. five   |
|   | 4. baseball   | d. six    |

You may move the arrow backwards to correct an error by pressing the BACK key.

Turn to page A-14

Do NOT press NEXT after entering an answer. Press NEXT to leave a question blank or skip an already answered question.

Match the number of players for each of the sports  
\*listed below:

- |     |    |            |    |        |
|-----|----|------------|----|--------|
| c   | 1. | basketball | a. | eleven |
| a   | 2. | football   | b. | nine   |
| b   | 3. | hockey     | c. | five   |
| ➤ d | 4. | baseball   | d. | six    |

You may move the arrow backwards to correct an  
error by pressing the BACK key.

Turn to page A-14 for display that would be seen  
if the above answers were given and the student  
then pressed the NEXT key.

Do NOT press NEXT after entering an answer. Press NEXT to  
leave a question blank or skip an already answered question.

Match the number of players for each of the sports listed below:

- |   |    |            |    |        |
|---|----|------------|----|--------|
| c | 1. | basketball | a. | eleven |
| a | 2. | football   | b. | nine   |
| b | 3. | hockey     | c. | five   |
| d | 4. | baseball   | d. | six    |

Check your answers carefully. If you wish to change any of them, press DATA. Otherwise press NEXT.

Turn to page A-16 if student pressed the NEXT key at this point.

Do NOT press NEXT after entering an answer. Press NEXT to leave a question blank or skip an already answered question.

Match the number of players for each of the sports listed below:

- |      |    |            |    |        |
|------|----|------------|----|--------|
| c    | 1. | basketball | a. | eleven |
| a    | 2. | football   | b. | nine   |
| no b | 3. | hockey     | c. | five   |
| no d | 4. | baseball   | d. | six    |

You got 2 correct this time. Try to correct your errors. Press the NEXT key to move the arrow.

Student would now attempt to correct errors.

Turn to page A-17 for display he would see if all questions were answered correctly.

Turn to page A-19 for display he would see if attempt limit is reached and he still has 1 or more incorrect answers.

Do NOT press NEXT after entering an answer. Press NEXT to leave a question blank or skip an already answered question.

Match the number of players for each of the sports listed below:

- |   |    |            |    |        |
|---|----|------------|----|--------|
| c | 1. | basketball | a. | eleven |
| a | 2. | football   | b. | nine   |
| d | 3. | hockey     | c. | five   |
| b | 4. | baseball   | d. | six    |

You're batting a 1000

Turn to page A-18.

Do NOT press NEXT after entering an answer. Press NEXT to leave a question blank or skip an already answered question.

**This represents the unit the student would be  
branched to if he answered the entire question  
correctly.**

**Turn to page A-21.**



Match the number of players for each of the sports listed below:

- |   |    |    |            |          |        |      |
|---|----|----|------------|----------|--------|------|
|   | a  | 1. | basketball | a.       | eleven |      |
|   | b  | 2. | football   | b.       | nine   |      |
| d | no | c  | 3.         | hockey   | c.     | five |
| b | no | d  | 4.         | baseball | d.     | six  |

The correct answers for the matches you missed are shown on the left. Study them carefully.

Turn to page A-20.

Do NOT press NEXT after entering an answer. Press NEXT to leave a question blank or skip an already answered question.

This represents the remediation unit that the student would be branched to if the correct answers were given to him.

Turn to page A-21.

Keep in mind that if you were preparing a question with this MONIFORM you would have several options available to you to "tailor" the question to your particular requirements. For example:

1. You could have a maximum of 10 matching items.
2. You could have single, double, or triple spacing between matching items.
3. You specify the number of attempts student is permitted.
4. You write the "correct answer feedback."
5. You specify the type of assistance the student receives when attempt limit is reached and he is still incorrect. You could have:  
(1) answer given (as in the sample), (2) the instructor called and the keyboard locked, or  
(3) no assistance given.

As you can see from the above options, you have considerable freedom in designing your question.

Now, let's look at the completed MONIFORM that produced this question. I think you will be pleasantly surprised with the small amount of code required.

## COMPLETED MONIFORM

unit sample  
zero n(offset),13  
at 708  
write Match the number of players for each of the sports  
listed below:

1. basketball	a. eleven
2. football	b. nine
3. hockey	c. five
4. baseball	d. six

pack temp2,n(offset+1),cadd  
pack temp2,caf1,You're batting 1000!  
calc arrow1 ← 1008  
noalt ← 4  
notries ← 3  
space ← 1  
assist ← answer  
join drive30  
next totcor=noalt,intro12,intro12a,

This is all of the code that would be in your lesson (except for Unit "setup" which is copied one time only). All code necessary for question execution resides in HumRRO lesson space. (Later, see Unit "setup".)

Finally, let's look at the uncompleted MONIFORM used for creating the sample. This is the format that you would copy into your lesson and modify to prepare your specific question.

## UNCOMPLETED MONIFORM

unit      form9                      \$\$ r form9 with your unit name  
 zero      n(offset),13                \$\$ copy as is

\*Go to "ID" mode to insert your question. Note the following:

- \*1. You are limited to 10 matching items.
- \*2. Answers must be letters (i.e., a, b, c, d, etc.).
- \*3. Note the screen position of where you want the first  
 \* arrow to appear.
- \*4. The -pack- command below requires the "correct answer  
 \* string" to be added (e.g., temp2,n(offset+1),dfebc).

pack	temp2,n(offset+1),	\$\$ add correct answ string
pack	temp2,caf1,	\$\$ add correct answer feedback
calc	arrow1↵	\$\$ add position for first arrow
	noalt↵	\$\$ add # of matching items used
	notries↵	\$\$ add # attempts student permitted
	space↵	\$\$ add # lines between match items
	assist↵	\$\$ add:instr-instr assistance
		\$\$ add:answer-correct answ given
		\$\$ add:none-no assistance given
join	drive30	\$\$ copy as is
next	totcor=noalt,nextu,otheru,	\$\$r nextu with next unit
		\$\$ otheru with remediation
		\$\$ unit

\*Your question is ready. Switch to student mode to try it.

Instructions for completing the MONIFORM follow the \$\$.

"r" means replace.

This completes the "Introduction to MONIFORMS".

When you return to the Main Index, it is suggested that you take a few minutes to browse through the remainder of the options listed.

The suggested order of browsing follows:

- (1) Sample Questions
- (2) MONIFORM Characteristics
- (3) Unit "setup"
- (4) How to Use MONIFORMS
- (5) For remaining sections—any order



## Sample Questions

B.

## **SAMPLE MONIFORM QUESTIONS**

In preparing sample questions it is not possible to give illustrations of all the options available to the author. Therefore, as you examine these sample questions keep in mind that if you were using the MONIFORM you would be able to tailor the question to your liking.

Specific characteristics of each sample question appear at the top of the page. The box on the bottom half of the page shows feedback messages that the student would receive depending on his response, or the particular attempt at the question.

Use the following definitions in examining the Index below:

random	= answer alternatives presented in random order
non-random	= answer alternatives presented in order specified by author
general	= general wrong answer feedbacks (not response specific)
specific	= response specific wrong answer feedbacks

---

### INDEX OF MONIFORM SAMPLE QUESTIONS

#### Multiple Choice

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#### Constructed Response

B-7	MONIFORM5—general
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B-9	MONIFORM7—general/specific

#### Matching

B-10	Student moves pointer
B-11	Student types answer

## MONIFORM1 SAMPLE QUESTION—MULTIPLE CHOICE

### Specifications

- Answer alternatives presented in random order
- 4 general (not response specific) try again feedbacks
- No long 1 feature (Student must press NEXT to judge)
- Student permitted 5 incorrect attempts
- Instructor called after 5th incorrect attempt
- If keyboard LOCKS, type: unlock
- Unanticipated response feedback
- Correct answer: donkey

In the Winnie the Pooh series what kind of animal is Eeyore?  
Select an animal from the choices below.

1. rabbit
2. bear
3. owl
4. donkey
5. kangaroo

>

### Feedbacks

*Feedback given student for correct answer*

You're no ass!

*Feedbacks given student for each incorrect try.*

- Try 1—No. Hint1: Eeyore has four legs.
- Try 2—No. Hint2: Eeyore kicks up a hit.
- Try 3—No. Hint3: Eeyore has a funny voice.
- Try 4—No Hint4: Eeyore is gray.
- Try 5—No Hint4: Eeyore is gray.
- Try 6—Please call your instructor.

## MONIFORM2 SAMPLE QUESTION—MULTIPLE CHOICE

### Specifications

- Author has written only 4 answer alternatives (maximum is 6)
- Answer alternatives presented in order specified by author
- Student permitted 3 attempts at question (author's option)
- After 3rd incorrect attempt the student is given the correct answer and branched to a remediation unit (This is 1 of 3 possible options available)
- long 1 feature
- correct answer: John L. Lewis

Of the people listed below, which one was a famous labor union leader?

1. Jim Brown
2. Bobby Riggs
3. Jules Verne
4. John L. Lewis

>

### Feedbacks

*Feedback given student for correct answer*

True! A real giant of a man.

*Feedbacks given student for each incorrect try.*

Try 1—No. Who has bushy eyebrows?

Try 2—No. Which one was once a miner?

Try 3—The correct answer is: John L. Lewis.

## MONIFORM3 SAMPLE QUESTION—MULTIPLE CHOICE

### Specifications

- Answer alternatives presented in random order
- Response specific feedbacks
- No long 1 feature
- 6 incorrect attempts permitted
- Instructor called after 6th incorrect attempt  
If keyboard LOCKS, type: unlock
- Unanticipated response feedback
- Correct answer: Linus

In the Charlie Brown cartoon series which character carries a blanket much of the time?

1. The big pumpkin
2. Schroeder
3. Pig Pen
4. Linus
5. Charlie Brown
6. Lucy

>

### Feedbacks

*Feedback given student for specific answer alternative selected.*

*Alternative 1—You've got to be putting me on.*

*Alternative 2—He's the piano player.*

*Alternative 3—The blanket would rot away.*

*Alternative 4\*—We all need our crutches.*

*Alternative 5—He needs gumption, not a blanket!*

*Alternative 6—Believe me. She needs no blanket.*

*\* Correct answer feedback*

## MONIFORM4 SAMPLE QUESTION—MULTIPLE CHOICE

### Specifications

- Answer alternatives presented in order specified by author (not random)
- Response specific try again feedbacks
- Long 1 feature
- 6 incorrect attempts permitted
- Correct answer given after 6th incorrect attempt
- Unanticipated response feedback
- Correct answer: Burt Reynolds

Who was the first male to appear nude in the centerfold of a women's magazine?

1. Tiny Tim
2. John Cameron Sweazey
3. Moshe Dayan
4. Burt Reynolds
5. Nixon
6. Wilbur Mills

»

### Feedbacks

*Feedback given student for specific answer alternative selected*

*Alternative 1—Who would pay to see him naked?*

*Alternative 2—He gets his kicks by being well dressed.*

*Alternative 3—No. He even keeps one eye covered.*

*Alternative 4\*—RIGHT! Shameless!*

*Alternative 5—What was uncovered was not his body.*

*Alternative 6—His secret love life was uncovered.*

*\*Correct answer feedback*

## MONIFORM5 SAMPLE QUESTION—CONSTRUCTED RESPONSE

### Specifications

- 4 general try again feedbacks (not response specific)
- 5 incorrect attempts permitted
- correct answer given after 5th incorrect attempt
- feedback provided if student presses NEXT without entering an answer
- specs: nomark,bumpshift,nookno
- optional words: the, drink, is, it, is
- answer: water OR H<sub>2</sub>O

What popular drink, used by people of all ages and in all cultures, has the fewest number of calories?

»

### Feedbacks

*Feedback given student for correct answer*

True, but it's not as good as Scotch!

*Feedbacks given student for each incorrect try*

Try 1—It is a clear fluid.

Try 2—It consists of hydrogen and oxygen.

Try 3—It is found in most homes in the U.S.

Try 4—We use it to make ice cubes.

Try 5—The correct answer is: water.



## MONIFORM6 SAMPLE QUESTION—CONSTRUCTED RESPONSE

### Specifications

- 5 specific wrong answer feedbacks
- 1 general wrong answer feedback
- feedback provided if student presses NEXT without entering an answer
- specs: nomark,bumpshift
- 6 incorrect attempts permitted
- answer given after 6th incorrect attempt
- optional words: day,is,the,we,celebrate,with,fireworks
- wrong answers: xmas OR Christmas  
Easter  
Valentines day OR St Valentine's day  
New Years day OR New Years OR 1 January  
OR New Years Eve  
Labor Day
- correct answers: 4th of July OR fourth of July OR  
forth of July OR July 4th

What day do Americans celebrate with fireworks?

>

### Feedbacks

#### *Feedback given student for correct answer*

They certainly are noisy.

#### *Feedback given student for specific wrong answers*

Xmas or Christmas

That's a Christmas tree.

Valentines Day or St. Valentine's Day

That's a day for lovers.

New Year's Day or New Year's or 1 January  
or New Years Eve

True, but most celebrate with booze.

Labor Day

It is too hot for firecrackers.

#### *Feedback given student for unanticipated wrong answers*

Come off it. Try again.

## MONIFORM7 SAMPLE QUESTION—CONSTRUCTED RESPONSE

### Specifications

- 5 response specific try again feedbacks
- 4 general try again feedbacks
- feedback provided if student presses NEXT without entering a response
- 6 incorrect attempts permitted
- instructor called after 6th incorrect attempt
  - If keyboard LOCKS, type: unlock
- specs: bumpshift, nomark
- optional words: it, is, it's, the, state, of
- wrong answers: Pa OR Pennsylvania  
NJ OR New Jersey  
NY OR New York  
Va OR Virginia  
Md OR Maryland
- correct answer: Delaware OR Del. OR DE

What was the first state to join the U.S.?

>

### Feedbacks

#### *Feedbacks given student for correct answer*

Delaware—A small but powerful state.

#### *Feedbacks given student for specific wrong answers*

Pa or Pennsylvania—They were second in the Union.  
NJ or New Jersey—That's known as the Garden State.  
NY or New York—The Empire State could not be first.  
Va or Virginia—Virginia is for lovers.  
Md or Maryland—Spiro's home doesn't make it.

#### *Feedbacks given student for unanticipated wrong answers*

1. It's located in the East on the ocean.
2. It's the second smallest state.
3. It has a river named after it.
4. It's between Pa, NJ, and Md.

## MONIFORM8 SAMPLE QUESTION—MATCHING

### Specifications

- matching items presented in random order
- student uses "w" and "x" keys to position pointer and select match
- 2 attempts at entire matching problem permitted
- after 2nd incorrect attempt correct answer given
- author writes NO feedbacks except correct answer feedback
- correct answers: 1-delicioso; 2-pacifista; 3-casa;  
4-voluptuoso; 5-grande; 6-hombre; 7-martes

Match the Spanish word with the English word.



- |    |            |            |
|----|------------|------------|
| 1. | delicious  | delicioso  |
| 2. | pacifist   | hombre     |
| 3. | house      | pacifista  |
| 4. | voluptuous | casa       |
| 5. | large      | Martes     |
| 6. | man        | voluptuoso |
| 7. | Tuesday    | grande     |

Use the "w" & "x" keys to position pointer. Then press NEXT

### Feedbacks

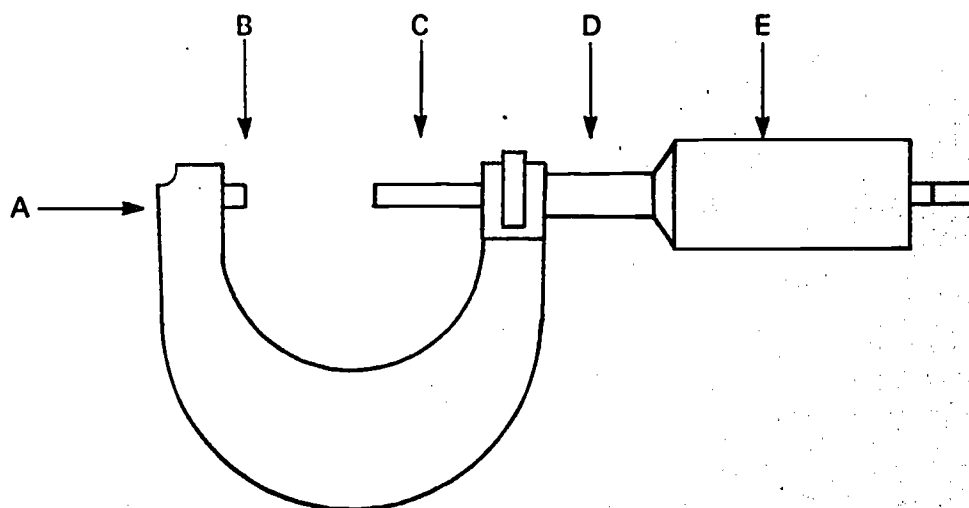
*Feedback given student for correct answer*

Muy Bien

## MONIFORM9 SAMPLE QUESTION—MATCHING

### Specifications

- student may move arrow up and down to leave item blank or correct answer
- student informed of specific incorrect matches
- 2 attempts at entire matching problem permitted
- after 3rd incorrect attempt correct answer given
- correct answers: 1-d,2-a,3-e,4-c,5-b



Match the parts of the micrometer shown above. Type the appropriate letters below.

- 
1. barrel
  2. frame
  3. thimble
  4. spindle
  5. anvil

You may move the arrow backwards to correct an error by pressing the BACK key

Do NOT press NEXT after entering an answer. Press NEXT to leave a question blank or skip an already answered question

### Feedbacks

*Feedback given student for correct answer*

You really know the micrometer.

## Completed MONIFORMS

C

## **COMPLETED MONIFORMS**

The reasons for including completed MONIFORMS in this lesson are:

1. They illustrate that very little of your lesson space is used for question preparation.  
(What you see is all that goes into your lesson.)
2. They show the correct completion of the various MONIFORMS and therefore may be of some assistance in debugging your MONIFORM question.

Use the following definitions in examining the Index below:

random	= answer alternatives presented in random order
non-random	= answer alternatives presented in order specified by author
general	= general wrong answer feedbacks (not response specific)
specific	= response specific wrong answer feedbacks

---

### INDEX OF COMPLETED MONIFORMS

#### Multiple Choice

##### Page

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#### Constructed Response

C-7	MONIFORM5—general
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C-9	MONIFORM7—general/specific

#### Matching

C-10	Student moves pointer
C-11	Student types answer

## MONIFORM1 (Completed) Multiple Choice

unit cm1  
zero v(offset),68  
calc pos ← 1010  
write < at,pos> In the Winnie the Pooh series what kind  
of animal is Eeyore? Select an animal from the  
choices below.  
\$\$  
calc lines ← 3  
pack temp,catest,donkey  
pack temp,dist1,bear  
pack temp,dist2,kangaroo  
pack temp,dist3,owl  
pack temp,dist4,rabbit  
pack temp,dist5,  
calc nodist ← 4  
pack temp,caf,You're no ass!  
pack temp,taf,No. Hint1: Eeyore has 4 legs.  
pack temp,taf2,No. Hint2: Eeyore kicks up a bit.  
pack temp,taf3,No. Hint3: Eeyore has a funny voice.  
pack temp,taf4,No. Hint4: Eeyore is gray.  
calc assist ← instr  
ntaf ← 4  
join drive1  
join drive12  
nextnow tries>notries,test6a,x,



## MONIFORM2 (Completed) Multiple Choice

```
unit      cm2
define    form1
zero      v(offset),68
calc      pos ← 1510
write     < at,pos> Of the people listed below, which one was
          a famous labor union leader?

calc      lines← 2
pack      temp,alt1,Jim Brown
pack      temp,alt2,Bobby Riggs
pack      temp,alt3,Jules Verne
pack      temp,alt4,John L. Lewis
pack      temp,alt5,
pack      temp,alt6,
calc      nodist ← 4
          answ ← 4
          notries ← 3

pack      temp,caf,True! A real giant of a man.
pack      temp,taf,No. Who had bushy eyebrows?
pack      temp,taf2No. Which one was once a miner?
pack      temp,taf3,
pack      temp,taf4,
calc      ntaf ← 2
          assist ← answer
          long1 ← 1

join      drive1a
join      drive12
nextnow   remed > 0,q2r,x,
```

### MONIFORM3 (Completed) Multiple Choice

```
unit    myname
next    nextu
define  form1
zero    v(offset),72
calc    pos ← 1510
write   < at,pos> In the Charlie Brown cartoon series which
        character carries a blanket much of the time?
        $$
        $$
calc    lines ← 2
pack    temp,catest,Linus
pack    temp,caf,We all need our crutch!
pack    temp,dist1,Charlie Brown
pack    temp,taf,He needs gumption, not a blanket!
pack    temp,dist2,Schroeder
pack    temp,taf2,He's the piano player.
pack    temp,dist3,Pig Pen
pack    temp,taf3,The blanket would rot away!
pack    temp,dist4,Lucy
pack    temp,taf4,Believe me. She needs no blanket!
pack    temp,dist5,The big pumpkin
pack    temp,taf5,You've gotta be putting me on!
calc    nodist ← 5
        notries ← 6
        assist ← instr
        long1 ← 0
join    drive1
join    drive9
nextnow  remed=0,x,itsname
```

# MONIFORM4 (Completed) Multiple Choice

unit Thisu  
next nexunit  
define form1  
zero v(offset),76  
calc pos ⇐ 1210  
write < at,pos> Who was the first male to appear nude  
in the centerfold of a women's magazine?  
\$\$  
\$\$  
calc lines ⇐ 2  
pack temp,alt1,Tiny Tim  
pack temp,taf,Who would pay to see him naked?  
pack temp,alt2,John Cameron Sweazey  
pack temp,taf2,He gets his kicks by being well dressed.  
pack temp,alt3,Moshe Dayan  
pack temp,taf3,No! He even keeps one eye covered.  
pack temp,alt4,Burt Reynolds  
pack temp,taf4,RIGHT! Shameless!  
pack temp,alt5,Nixon  
pack temp,taf5,What was uncovered was not his body.  
pack temp,alt6,Wilbur Mills  
pack temp,taf6,His secret love life was uncovered.  
calc nodist ⇐ 6  
answ ⇐ 4  
assist ⇐ answer  
long1 ⇐ 1  
join drive1a  
join drive9  
nextnow remed=0,x,q40

# MONIFORM5 (Completed) Constructed Response

```

unit      mnform5
define    form1
zero      v(offset),68
calc      pos ← 130
write     < at, pos > What popular drink used by people of all
          ages, and in all cultures, has the fewest number of
          calories?
          $$
calc      lines ← 3
vocabs    mnform5
          < the, drink, is, it >
          catext, water, h2o)
pack      temp, catext, Water
pack      temp, caf, True, but it's not as good as Scotch!
pack      temp, taf, It is a clear fluid.
pack      temp, taf2, It consists of hydrogen and oxygen.
pack      temp, taf3, It is found in most homes in the U.S.
pack      temp, taf4, We use it to make ice cubes.
calc      ntaf ← 4
          notries ← 5
          assist ← answer
          pos ← pos+ (linesx100)
arrow     pos+200
specs     nomark, bumpshift, nookno
join      drive16
nextnow   remed=0,x,q5a
goto      ansok, drive14, drive15,
concept   catext

```

## MONIFORM6 (Completed) Constructed Response

```

unit      mnform6
define    form1
zero      v(offset),72
calc      pos ← 2210
vocabs    mnform6
          < day,is,the,we,celebrate,with,fireworks>
          (catext,4*th*of*july,fourth*of*july,forth*of*july,
          july*4*th)
          (alt1,xmas,christmas)
          (alt2,easter)
          (alt3,valentines*day,st*valentine7s*day)
          (alt4,new*years*day,new*years,1*january,new*years*eve)
          (alt5,labor*day)
write     < at,pos> What day do we in the United States celebrate
          with fireworks?
calc      lines ← 2
pack      temp,catext,Fourth of July
pack      temp,caf,They certainly are noisy.
pack      temp,taf,That's a Christmas tree.
pack      temp,taf2,A rabbit doesn't shoot firecrackers.
pack      temp,taf3,That's a day for lovers.
pack      temp,taf4,True, but most celebrate with booze.
pack      temp,taf5,It is too hot for firecrackers.
pack      temp,waf,Come off it. Try again.
calc      notries ← 6
          assist ← answer
          pos ← pos+(lines×100)
arrow     post+200
specs     nomark,bumpshift
join      drive16
nextnow   remed=0,x,q6a
goto      ansok,drive14,drive17,
concept    cate:t
concept    alt1
concept    alt2
concept    alt3
concept    alt4
concept    alt5

```

## MONIFORM7 (Completed) Constructed Response

```

unit      yrname
define    form1
zero      v(offset),79
calc      pos ← 2210
vocabs    yrname
          < it,is,it7s,the,state,of>
          (catext,delaware,del,de)
          (alt1,pa,pennsylvania)
          (alt2,nj,new*jersey)
          (alt3,ny,new*york)
          (alt4,va.virginia)
          (alt5,md,maryland)

write     < at,pos> What was the first state to join the U.S.?
calc      lines ← 1
pack      temp,catext,Delaware
pack      temp,caf,A small but powerful state.
pack      temp,taf,They were second in the Union.
pack      temp,taf2,That's known as the Garden State.
pack      temp,taf3,The Empire State could not be first.
pack      temp,taf4,Virginia is for lovers.
pack      temp,taf5,Spiro's home doesn't make it.
pack      temp,waf,It's located in the East on the ocean.
pack      temp,waf2,It's the second smallest state.
pack      temp,waf3,It has a river named after it.
pack      temp,waf4,It's between Pa,NJ, and Md.
calc      notries ← 6
          ntaf ← 4
          assist ← instr
          pos ← pos+(linesx10 0)
arrow     pos+200
specs     nomark,bumpshift
join      drive16
nextnow   remed=0,x,review,
goto      ansok,drive14,drive18,
concept   catext
concept   alt1
concept   alt2
concept   alt3
concept   alt4
concept   alt5

```

# MONIFORM8 (Completed) Matching

unit myunit  
define form1  
zero v(offset),85  
at 1410  
write Match the Spanish word with the English word.

1. delicious
2. pacifist
3. house
4. voluptuous
5. large
6. man
7. Tuesday

pack temp,match1,delicioso  
pack temp,match2,pacifista  
pack temp,match3,casa  
pack temp,match4,voluptuoso  
pack temp,match5,grande  
pack temp,match6,hombre  
pack temp,match7,Martes  
pack temp,match8,  
pack temp,match9,  
pack temp,caf,Muy bien!  
calc posA ← 1612  
posB ← 1633  
pos ← 24  
noalt ← 7  
assist ← answer  
join drive19  
jump rightT=noalt qdex,q8a

# MONIFORM9 (Completed) Matching

unit      itsname  
 zero      n(offset),13  
 at        912  
 write     Match the chemical compounds below with  
             their formulae.

- |                       |                         |
|-----------------------|-------------------------|
| 1. Sulfuric Acid      | a. $C_{12}H_{22}O_{11}$ |
| 2. Water              | b. $KCl$                |
| 3. Sugar              | c. $H_2O_2$             |
| 4. Table Salt         | d. $H_2SO_4$            |
| 5. Hydrochloric Acid  | e. $NaCl$               |
| 6. Potassium Chloride | f. $H_2O$               |
| 7. Lead Oxide         | g. $HCl$                |
| 8. Peroxide           | h. $PbO_2$              |

pack      temp2,n(offset+1),dfaegbhc  
 pack      temp2,caf1,You did extremely well.  
 calc      arrow1 ⇐ 1208  
             noalt ⇐ 8  
             notries ⇐ 4  
             space ⇐ 2  
             assist ⇐ instr  
 join      drive30  
 next      totcor=noalt,qdex,qdex,



## **Uncompleted MONIFORMS**

D

## **UNCOMPLETED MONIFORMS**

The uncompleted MONIFORMS shown in this section of the lesson represent code that must be copied into your lesson space and then modified by following instructions that follow the \$\$ in the MONIFORMS.

The uncompleted MONIFORMS that you copy into your lesson are located in lesson "hum8". Additional assistance in completing the MONIFORMS can be obtained from the Main Index (page J-1, "Assistance with Code Completion").

Use the following definitions in examining the Index below:

random	= answer alternatives presented in random order
non-random	= answer alternatives presented in order specified by author
general	= general wrong answer feedbacks (not response specific)
specific	= response specific wrong answer feedbacks

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### INDEX OF UNCOMPLETED MONIFORMS

#### Multiple Choice

##### Page

D-3	MONIFORM1—random/general
D-4	MONIFORM2—non-random/general
D-5	MONIFORM3—random/specific
D-6	MONIFORM4—non-random/specific

#### Constructed Response

D-7	MONIFORM5—general
D-8	MONIFORM6—specific
D-9	MONIFORM7—general/specific

#### Matching

D-10	Student moves pointer
D-11	Student types answer

## MONIFORM1 (Uncompleted)—Multiple Choice

unit	form1	\$\$ r form1 with your unit name
next	nextu	\$\$ r nextu with unit name S goes to if
		\$\$ he gives correct answer
define	form1	\$\$ copy as is
zero	v(offset),68	\$\$ copy as is
calc	pos←	\$\$ add screen position to begin quest
write	< at,pos >	\$\$ add after > line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines←	\$\$ add # of lines of questions used
pack	temp,catext,	\$\$ add correct answer alternative
pack	temp,dist1,	\$\$ add text for distractor 1
pack	temp,dist2,	\$\$ add text for distractor 2
pack	temp,dist3,	\$\$ add text for distractor 3
pack	temp,dist4,	\$\$ add text for distractor 4
pack	temp,dist5,	\$\$ add text for distractor 5
calc	nodist←	\$\$ add # distractors used
	notries←	\$\$ add # attempts permitted
	long1←	\$\$ add 1 for immed. judging (long1); add
		\$\$ 0 if S must first press next to judge
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,taf,	\$\$ add text for try again feedback 1
pack	temp,taf2,	\$\$ add text for try again feedback 2
pack	temp,taf3,	\$\$ add text for try again feedback 3
pack	temp,taf4,	\$\$ add text for try again feedback 4
calc	ntaf←	\$\$ add # of try again feedbacks used
	assist←	\$\$ add: instr—for instructor assistance OR
		\$\$ add: answer—correct answer given
		\$\$ add: none—no assistance given
join	drive1	\$\$ copy as is
join	drive12	\$\$ copy as is
nextnow	remed>0, otheru,x,	\$\$ r "otheru" with unit S
		\$\$ goes if answ given him

## MONIFORM2 (Uncompleted) Multiple Choice

unit	form2	\$\$ r form2 with your unit name
next	nextu	\$\$ r nextu with unit name S goes to
		\$\$ if he gives correct answer
define	form1	\$\$ copy as is
zero	v(offset),68	\$\$ copy as is
calc	pos←	\$\$ add screen position to begin question
write	< at,pos>	\$\$ add after > line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines←	\$\$ add # of lines of questions used
*you are allowed 6 answer alternatives 1 of which		
*must be the correct answer.		
pack	temp,alt1,	\$\$ add answer alternative 1
pack	temp,alt2,	\$\$ add answer alternative 2
pack	temp,alt3,	\$\$ add answer alternative 3
pack	temp,alt4,	\$\$ add answer alternative 4
pack	temp,alt5,	\$\$ add answer alternative 5
pack	temp,alt6,	\$\$ add answer alternative 6
calc	nodist←	\$\$ add # alternatives used
	answ←	\$\$ add the # of the alternative
		\$\$ which is the correct answer
	notries←	\$\$ add # attempts permitted
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,taf,	\$\$ add text for try again feedback 1
pack	temp,taf2,	\$\$ add text for try again feedback 2
pack	temp,taf3,	\$\$ add text for try again feedback 3
pack	temp,taf4,	\$\$ add text for try again feedback 4
calc	ntaf←	\$\$ add # of try again fdbacks used (1,2,3,4)
	assist←	\$\$ add: instr—for instr assistance <u>OR</u>
		\$\$ answer—correct answer given OR none
	long1←	\$\$ add 1 for immed. judging (long1);add 0
		\$\$ if S must first press NEXT
join	drive1a	\$\$ copy as is
join	drive12	\$\$ copy as is

### MONIFORM3 (Uncompleted) Multiple Choice

unit	form3	\$\$ r form3 with your unit name
next	nextu	\$\$ r nextu with name of next unit
define	form1	\$\$ copy as is
zero	v(offset),72	\$\$ copy as is
calc	pos←	\$\$ add screen position to begin question
write	< at,pos>	\$\$ add line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines←	\$\$ add # lines of questions used
pack	temp,catest,	\$\$ add text for correct
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,dist1,	\$\$ add text for 1st distractor (dist)
pack	temp,taf,	\$\$ add text of try again fdback dist1
pack	temp,dist2,	\$\$ add text for 2d distractor
pack	temp,taf2,	\$\$ add text of try again fdback dist2
pack	temp,dist3,	\$\$ add text for 3d distractor
pack	temp,taf3,	\$\$ add text of try again fdback dist3
pack	temp,dist4,	\$\$ add text for 4th distractor
pack	temp,taf4,	\$\$ add text of try again fdback dist4
pack	temp,dist5,	\$\$ add text for 5th distractor
pack	temp,taf5,	\$\$ add text of try again fdback dist5
calc	nodist←	\$\$ add # distractors written
	notries←	\$\$ add # attempts student permitted
	assist←	\$\$ add: instr—for instructor assistance OR
		\$\$ add: answer—answer given OR none
	long1←	\$\$ add 1 for immed. judging (long1); add 0
		\$\$ if S must first press next
join	drive1	\$\$ copy as is
join	drive9	\$\$ copy as is
nextnow	remed=0,x,otheru,	\$\$ r otheru with name of
		\$\$ remediation unit

## MONIFORM4 (Uncompleted) Multiple Choice

unit	form4	\$\$ r form4 with your unit name
next	nextu	\$\$ r nextu with name of next unit
define	form1	\$\$ copy as is
zero	v(offset),76	\$\$ copy as is
calc	pos ←	\$\$ add screen position to begin question
write	< at,pos >	\$\$ add line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines ←	\$\$ add # lines of questions used
*this question allows 6 answer alternatives 1 of which must		
*be the correct answer		
pack	temp,alt1,	\$\$ add answer alternative 1
pack	temp,taf,	\$\$ add alternative 1 try again fdback
pack	temp,alt2,	\$\$ add answer alternative 2
pack	temp,taf2,	\$\$ add alternative 2 try again fdback
pack	temp,alt3,	\$\$ add answer alternative 3
pack	temp,taf3,	\$\$ add alternative 3 try again fdback
pack	temp,alt4,	\$\$ add answer alternative 4
pack	temp,taf4,	\$\$ add alternative 4 try again fdback
pack	temp,alt5,	\$\$ add answer alternative 5
pack	temp,taf5,	\$\$ add alternative 5 try again fdback
pack	temp,alt6,	\$\$ add answer alternative 6
pack	temp,taf6,	\$\$ add alternative 6 try again fdback
calc	nodist ←	\$\$ add # alternatives written
	answ ←	\$\$ add the # of the alternative which
		\$\$ is the correct answer
	notries ←	\$\$ add # attempts student permitted
	assist ←	\$\$ add: instr—for instructor assistance OR
		\$\$ add: answer—correct answer given OR none
	long1 ←	\$\$ add 1 for immed. judging (long1); add 0
		\$\$ if S must press next to judge answer
join	-drive1a	\$\$ copy as is
join	drive9	\$\$ copy as is
nextnow	remed=0, x,otheru,	\$\$ r otheru with name of
		\$\$ remediation unit

## MONIFORM5 (Uncompleted) Constructed Response

unit	form5	\$\$ r form5 with your unit name
next	nextu	\$\$ r nextu with unit name S goes to
define	form1	\$\$ copy as is
zero	v(offset),68	\$\$ copy as is
calc	pos←	\$\$ add starting position of question
write	< at,pos >	\$\$ add line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines←	\$\$ add # lines if question used
vocabs	form3	\$\$ r form3 with your unit name
	< zz,zz,zz >	\$\$ r zzzz with optional words wanted
	(catext,zzzz)	\$\$ r zzzz with correct answer(s)
pack	temp,catext,	\$\$ add correct answer (only one)
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,taf,	\$\$ add text for try again fdback try 1
pack	temp,taf2,	\$\$ add text for try again fdback try 2
pack	temp,taf3,	\$\$ add text for try again fdback try 3
pack	temp,taf4,	\$\$ add text for try again fdback try 4
calc	ntaf←	\$\$ add # of try again fdbacks used
	notries←	\$\$ add # attempts student permitted
	assist←	\$\$ add: instr—for instructor assistance OR
		\$\$ add: answer—correct answer given OR none
	pos←pos+(lines×100)	\$\$ copy as is
arrow	pos+200	\$\$ copy as is
specs	\$\$	\$\$ r first \$\$ with specs you want
join	drive16	\$\$ copy as is
nextnow	remed=0,x,otheru,	\$\$ r otheru with remediation unit
gotc	ansok,drive14,drive15,	\$\$ copy as is
concept	catext	\$\$ copy as is



## MONIFORM6 (Uncompleted) Constructed Response

unit	form4	\$\$ r form6 with your unit name
next	nextu	\$\$ r nextu with your next unit
define	form1	\$\$ copy as is
zero	v(offset),72	\$\$ copy as is
calc	pos ←	\$\$ add screen position to start
write	← at,pos >	\$\$ add line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines ←	\$\$ add # question lines used
vocabs	form6	\$\$ r form6 with your unit name
	<zz,zz,zz>	\$\$ r zz's with optional words
	(catext,zzzz)	\$\$ r zz's with correct answer
	(alt1,wrong1)	\$\$ r wrong 1 with incorrect answer 1
	(alt2,wrong2)	\$\$ r wrong 2 with incorrect answer 2
	(alt3,wrong3)	\$\$ r wrong 3 with incorrect answer 3
	(alt4,wrong4)	\$\$ r wrong 4 with incorrect answer 4
	(alt5,wrong5)	\$\$ r wrong 5 with incorrect answer 5
pack	temp,catext,	\$\$ add correct answer (one only)
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,taf,	\$\$ add feedback for wrong answer 1
pack	temp,taf2,	\$\$ add feedback for wrong answer 2
pack	temp,taf3,	\$\$ add feedback for wrong answer 3
pack	temp,taf4,	\$\$ add feedback for wrong answer 4
pack	temp,taf5,	\$\$ add feedback for wrong answer 5
pack	temp,waf,	\$\$ add fdback—"general" wrong answer
calc	notries ←	\$\$ add # attempts student permitted
	assist ←	\$\$ add: instr—for instructor assistance OR
		\$\$ add: answer—correct answer given OR none
	pos ← pos + (lines x 100)	\$\$ copy as is
	arrow pos + 200	\$\$ copy as is
	specs \$\$	\$\$ r first \$\$ with desired specs
join	drive16	\$\$ copy as is
nextnow	remed=0x,otheru,	\$\$ r otheru with name remed unit
goto	ansok,drive14,drive17,	\$\$ copy as is
concept	catext	\$\$ copy as is
concept	alt1	\$\$ copy as is (delete if not used)
concept	alt2	\$\$ copy as is (delete if not used)
concept	alt3	\$\$ copy as is (delete if not used)
concept	alt4	\$\$ copy as is (delete if not used)
concept	alt5	\$\$ copy as is (delete if not used)

# MONIFORM7 (Uncompleted) Constructed Response

unit	form7	\$\$ r form7 with your unit name
next	nextu	\$\$ r nextu with your next unit
define	form1	\$\$ copy as is
zero	v(offset),88	\$\$ copy as is
calc	pos←	\$\$ add screen position to start
write	< ac,pos>	\$\$ add line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines←	\$\$ add # question lines used
vocabs	form7	\$\$ r form7 with your unit name
	< zz,zz,zz>	\$\$ r zz's with optional words
	(catext,zzzz)	\$\$ r zz's with correct answer
	(alt1,wrong1)	\$\$ r wrong 1 with incorrect answer 1
	(alt2,wrong2)	\$\$ r wrong 2 with incorrect answer 2
	(alt3,wrong3)	\$\$ r wrong 3 with incorrect answer 3)
	(alt4,wrong4)	\$\$ r wrong 4 with incorrect answer 4
	(alt5,wrong5)	\$\$ r wrong 5 with incorrect answer 5
pack	temp,catext,	\$\$ add correct answer (one only)
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,taf,	\$\$ add feedback for wrong answer 1
pack	temp,taf2,	\$\$ add feedback for wrong answer 2
pack	temp,taf3,	\$\$ add feedback for wrong answer 3
pack	temp,taf4,	\$\$ add feedback for wrong answer 4
pack	temp,taf5,	\$\$ add feedback for wrong answer 5
pack	temp,waf,	\$\$ add general feedback 1
pack	temp,waf2,	\$\$ add general feedback 2
pack	temp,waf3,	\$\$ add general feedback 3
pack	temp,waf4,	\$\$ add general feedback 4
calc	ntaf←	\$\$ add # of general fdbaks used
	notries←	\$\$ add # attempts student permitted
	assist←	\$\$ add: instr—for instructor assistance OR
		\$\$ add: answer—correct answer given OR none
	pos←pos+(lines x 100)	\$\$ copy as is
arrow	pos+200	\$\$ copy as is
specs	\$\$	\$\$ r first \$\$ with desired specs
join	drive16	\$\$ copy as is
nextnow	remed=0,x,otheru,	\$\$ r otheru with name remed unit
goto	ansok,drive14,drive18,	\$\$ copy as is
concept	catext	\$\$ copy as is
concept	alt1	\$\$ copy as is (delete if not used)
concept	alt2	\$\$ copy as is (delete if not used)
concept	alt3	\$\$ copy as is (delete if not used)
concept	alt4	\$\$ copy as is (delete if not used)
concept	alt5	\$\$ copy as is (delete if not used)

## MONIFORM8 (Uncompleted) Matching

```

unit      form8          $$ r form8 with your unit name
define    form1          $$ copy as is
zero      v(offset),85   $$ copy as is
*enter ID mode to insert your question. NOTE THE FOLLOWING:
*1. Max of 9 match questions (items) numbered 1 thru N
*2. Do not include match answers (these are packed below)
*3. Do not include instructions for moving pointer
*4. Graphics may be included in matching question
*5. Note screen position of 1st matching question (enter it
*   below after the arrow in "calc posA<")
*6. NOTE: See "Sample Question" & "Completed MONIFORM" in
*   lesson "moniform" (student) for help, if necessary
pack      temp,match1,    $$ add match answer item 1
pack      temp,match2,    $$ add match answer item 2
pack      temp,match3,    $$ add match answer item 3
pack      temp,match4,    $$ add match answer item 4
pack      temp,match5,    $$ add match answer item 5
pack      temp,match6,    $$ add match answer item 6
pack      temp,match7,    $$ add match answer item 7
pack      temp,match8,    $$ add match answer item 8
pack      temp,match9,    $$ add match answer item 9
pack      temp,caf,       $$ add correct answer feedback
calc      posA<          $$ add screen position of first
                                $$ match question
                                posB<          $$ add screen position for first
                                $$ match answer
                                pos<          $$ add line # for feedbacks to begin
                                $$ (no greater than 28)
                                noalt<        $$ add # match questions used
                                notries<      $$ add # attempts student permitted
                                assist<       $$ add: instr—for instructor assistance OR
                                $$ add: answer—correct answer given OR none
join      drive19         $$ copy as is
jump      rightT=noalt,nextu,review,    $$ r nextu with next unit
                                                $$ r review with unit S
                                                $$ goes if answ given him

```

## MONIFORM9 (Uncompleted) Matching

unit      form9              \$\$ r form9 with your unit name

zero      n(offset),13          \$\$ copy as is

\*Go to "ID" mode to insert your question. Note the following:

- \*1. You are limited to 10 matching items
- \*2. Answers must be letters (i.e., a, b, c, d, etc.)
- \*3. Note the screen position of where you want the first  
\*    arrow to appear
- \*4. The -pack- command below requires the "correct answer  
\*    string" to be added (e.g., temp2,n(offset + 1),dfebc)

pack      temp2,n(offset + 1), \$\$ add correct answ string

pack      temp2,caf1,            \$\$ add correct answer message

calc      arrow1←                \$\$ add position for first arrow

            noalt←                \$\$ add # of matching items used

            notries←            \$\$ add # of times thru items allowed

            space←              \$\$ add 1, 2, or 3 for spaces btwn items

            assist←              \$\$ add: instr—for instructor assistance OR

                                  \$\$ add: answer—correct answer given OR none

join      drive30              \$\$ copy as is

next      totcor=noalt,nextu,otheru,    \$\$ r nextu with next unit

                                  \$\$ r otheru with remediation

                                  \$\$ unit

## **MONIFORM Characteristics**

## **MONIFORM CHARACTERISTICS**

Many of the MONIFORMS are similar except for the type of feedback given the student for an incorrect answer. In the MONIFORMS they are called "general" feedbacks and "response specific" feedbacks. They are defined as follows:

### **General**

The feedback given is the same, independent of the specific incorrect answer given by the student. However, different feedbacks may be given for successive attempts at the question.

### **Response Specific**

The feedback given is dependent upon the specific incorrect response given by the student.

Use the following definitions in examining the Index below:

random	= answer alternatives presented in random order
non-random	= answer alternatives presented in order specified by author
general	= general wrong answer feedbacks (not response specific)
specific	= response specific wrong answer feedbacks

---

### INDEX OF MONIFORM CHARACTERISTICS

#### Multiple Choice

##### Page

E-3	MONIFORM1—random/general
E-4	MONIFORM2—non-random/general
E-5	MONIFORM3—random/specific
E-6	MONIFORM4—non-random/specific

#### Constructed Response

E-7	MONIFORM5—general
E-8	MONIFORM6—specific
E-9	MONIFORM7—general/specific

#### Matching

E-10	Student moves pointer
E-11	Student types answer

## **MONIFORM1 CHARACTERISTICS**

### **(Multiple Choice)**

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page

- |      |  |
|------|--|
| E-12 | One correct answer (40 characters long)  |
| E-13 | 1-4 distractors (40 characters long)   |
| E-14 | Answer alternatives presented in random order  |
| E-15 | Option of having long 1 feature  |
| E-16 | Author specifies # of attempts student is allowed  |
| E-17 | 1 author specified correct answer feedback   |
| E-18 | 1-4 author specified <u>general</u> feedbacks  |
| E-19 | Unanticipated response feedback  |
| E-20 | Author specifies type of assistance student receives when try limit reached (instr,answer, none) |
| E-21 | 2 author specified branching units   |



**MONIFORM2 CHARACTERISTICS**  
**(Multiple Choice)**

All characteristics are identical to MONIFORM1 except:

MONIFORM1—answer alternatives presented in random order

MONIFORM2—answer presented in order  
specified by author

Turn to page E-3 to see characteristics of MONIFORM1.

### **MONIFORM3 CHARACTERISTICS**

**(Multiple Choice)**

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page	
E-12	One correct answer (40 characters long)
E-13	1-4 distractors (40 characters long)
E-14	Answer alternatives presented in random order
E-15	Option of having long 1 feature
E-16	Author specified # of attempts student is allowed
E-17	1 author specified correct answer feedback
E-22	1-5 response specific incorrect answer try again feedbacks
E-19	Unanticipated response feedback
E-20	Author specified type of assistance student receives when try limit reached (instr,answer, none)
E-21	2 author specified branching units

**MONIFORM4 CHARACTERISTICS**  
**(Multiple Choice)**

All characteristics are identical to MONIFORM3 except:

MONIFORM3—answer alternatives presented in random order

MONIFORM4—answer alternatives presented in order specified by author

Turn to page E-5 to see the characteristics of MONIFORM3.

## **MONIFORM5 CHARACTERISTICS**

### **(Constructed Response)**

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page	
E-23	Synonymous answers (or phrases) permitted
E-24	Optional words permitted in answer
E-25	Author selected specification for judging of student answer (only specs permitted with -concept- command)
E-17	1 author specified correct answer feedback
E-16	Author specified # of attempts student permitted
E-26	1-4 author specified <u>general</u> (not response specific) incorrect answer try again feedbacks
E-19	Unanticipated response feedback
E-20	Author specified type of assistance student receives when try limit reached (instr, answer, none)
E-21	2 author specified branching units

## **MONIFORM6 CHARACTERISTICS**

### **(Constructed Response)**

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

<b>Page</b>	
<b>E-23</b>	<b>Synonymous answers (or phrases) permitted</b>
<b>E-24</b>	<b>Optional words permitted in answer</b>
<b>E-25</b>	<b>Author selected specification for judging of student answer (only specs permitted with -concept- command)</b>
<b>E-17</b>	<b>1 author specified correct answer feedback</b>
<b>E-22</b>	<b>1-5 response specific incorrect answer try again feedbacks</b>
<b>E-27</b>	<b>1 general incorrect answer try again feedback</b>
<b>E-16</b>	<b>Author specified # of attempts student permitted</b>
<b>E-19</b>	<b>Unanticipated response feedback</b>
<b>E-20</b>	<b>Author specified type of assistance student receives when try limit reached (instr, answer, none)</b>
<b>E-21</b>	<b>2 author specified branching units</b>

### **MONIFORM7 CHARACTERISTICS (Constructed Response)**

**MONIFORM7 is a combination of MONIFORM5 and MONIFORM6. That is, in MONIFORM5 only "general" feedbacks (not response specific) are presented to the student for incorrect answers; in MONIFORM6 response specific feedbacks are given.**

**MONIFORM7 provides the student with both "general" and "response specific" feedbacks.**

**Do not use MONIFORM7 when MONIFORM5 or 6 will satisfy your needs inasmuch as MONIFORM7 uses a little more ecs for question execution.**

**Turn to page E-7 to see the characteristics for MONIFORM5.  
Turn to page E-8 to see the characteristics for MONIFORM6.**

## **MONIFORM8 CHARACTERISTICS (Matching)**

For additional information on any MONIFORM characteristic,  
listed below, turn to the page indicated.

Page	
E-28	Maximum of 9 matching items permitted
E-29	Matching answer alternatives presented in random order
E-30	Student moves pointer to select match
E-31	After completing all matches, student given opportunity to change answers
E-16	Number of attempts at entire problem specified by author
E-32	MONIFORM provided feedback stating number of correct matches made on each attempt
E-17	Author specified correct answer feedback
E-33	3 types of author specified assistance given
E-34	2 branching units

## **MONIFORM9 CHARACTERISTICS**

### **(Matching)**

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

<b>Page</b>	
<b>E-35</b>	Maximum of 10 matching items permitted (order specified by author)
<b>E-36</b>	Single, double, or triple spacing permitted between matching items
<b>E-37</b>	Graphic displays may be incorporated into matching problem
<b>E-38</b>	Student permitted to match items in any order desired
<b>E-39</b>	Student permitted to change answers before final judging
<b>E-16</b>	Number of attempts at entire problem specified by author
<b>E-17</b>	Author specified correct answer feedback
<b>E-40</b>	Student informed of specific incorrect matches made
<b>E-41</b>	3 types of author specified assistance given
<b>E-34</b>	2 types of branching



**Correct answer text is:**

- 1. What you specify as the text for the correct answer.**
- 2. Limited to 40 characters (shifted characters count as 2 characters)**
- 3. Presented in random order (as are the distractors).  
For example, the correct answer may be presented as "1" to student "A" and "6" to student "B".**

**Distractors are:**

1. Incorrect answer alternatives that you provide.
2. Limited to 40 characters (shifted characters count as 2).
3. Presented in random order (as is the correct answer).  
For example, the distractor you write for (dist1) may appear as answer alternative 1 thru 6. Therefore, you need not worry about the order in which you put them in the MONIFORM.

Answer alternatives (i.e., correct answer and distractors) are presented to the student in random order. For example, the correct answer may be "3" for student "A" whereas it may be "6" for student "B".

The long1 feature permits you to decide whether you want judging to begin as soon as the student enters an answer, or whether you want him to press NEXT before judging begins.

**This option permits you to designate the number of  
incorrect attempts the student will be permitted.**

**The correct answer feedback is:**

- 1. The congratulatory message you wish to give the student if he gives the correct answer.**
- 2. Limited to 40 characters (shifted characters count as 2).**

General feedbacks are attempt-related rather than response-related. That is, on the first incorrect attempt at the question the student will receive general feedback1; on the second incorrect attempt, general feedback2; etc. (For multiple choice questions this is independent of the specific wrong answer given by the student.)

If the student does not enter an answer or enters an answer outside of the answer alternative range (multiple choice), she is given a MONIFORM generated feedback.



This option permits you to designate the type of assistance the student will receive if he is still incorrect after the number of attempts that you have specified (for notries) is reached.

There are three types of assistance available:

- (1) instr — A message appears: Please Call Your Instructor. The keyboard locks until instructor types: unlock. The student re-tries the question.
- (2) answer — A message appears: The correct answer is: (correct answer). Student is then branched to an author specified remediation type unit.
- (3) none — No assistance is given. The student is branched to an author specified remediation type unit.

In all MONIFORMS the author may specify two different units that the student will be branched to depending upon his response to the question and the type of assistance that the author has specified:

- (1) The unit that the student will be branched to if the question is answered correctly.
- (2) The unit the student will be branched to if the attempt limit is reached and the author has specified that he be given the correct answer. After being given the correct answer he may be branched to a unit other than the one he would go to if he answered the question correctly. This feature allows the author to provide remediation type instruction to the student. (If the author does not wish remediation instruction he would enter the same unit in both cases.) NOTE: If the author specifies that the instructor be called to provide assistance, branching to a remediation type unit is not permitted.

Response specific feedbacks are those feedbacks that the author provides for specific wrong answers. That is, the feedback the student receives is dependent upon the specific wrong answer that is given. After receiving the feedback, the student re-attempts the question.

You may specify the "correct" answer as being a single word or a phrase. You may also specify synonymous words and phrases to be judged as correct. NOTE: Since these MONIFORMS use the -concept- and -vocab- commands for answer judging, be certain that you understand how phrases and synonymous words are coded with these commands.

The author may designate optional words that may be included in the student's answer that will not affect judging. However, inasmuch as these MONIFORMS use -vocab- and -concept- commands for judging, optional words will not be accepted that come in the middle of an answer consisting of a phrase (i.e., optional words must precede or follow the correct answer).

You have the option of having any "specs" that you wish used for judging the student's answer.

NOTE: These MONIFORMS use the -concept- command for execution. Not all "specs" work with the -concept- command. Only the "specs" listed will work:

best  
bumpshift  
nomark  
nookno  
noorder  
okcap  
okspell  
okxvocab

See Lesson AIDS  
for explanation.

General feedbacks are attempt-related rather than response-related. That is, on the first incorrect attempt at the question the student will receive general feedback1; on the second incorrect attempt, general feedback2; etc.

You are permitted one "general" feedback to be used in cases where the student gives an answer other than one that you have specified.



You may have as many as 9 matching items with MONIFORM8.

The match alternatives (answer alternatives) are presented in random order to the student. Therefore, when you write these you may disregard the order in which they are written.

Match alternatives are limited to 40 characters. (Shifted characters count as 2.) NOTE: Be certain when you indicate where you want these alternatives to appear on the screen that you have allowed for sufficient space.

Match items (answer alternatives) are presented to the student in random order.

The student selects his match (answer) to a specific matching item by moving a pointer ( ➡ ) up and down by pressing the "w" and "x" keys. When the pointer is positioned where he wants it he presses NEXT to have his answer recorded.

Each time the student has completed the entire matching problem he receives the following message:

“Check your answers carefully. To change any of them press the ‘r’ key to rework the problem. Otherwise, press NEXT. Remember, you must have a number next to each alternative.”

If he does indeed press the “r” key his previous answers will be erased and he must re-do the entire problem.

Each time the student has completed all matching items he is informed of the number of correct matches that he made on that time through the matching question. He then re-tries the entire problem. Note, however, that he is not told which item he matched correctly.

This option permits you to designate the type of assistance the student will receive if his answers are still incorrect after he reaches the number of attempts that you have specified (for notries).

There are three types of assistance available:

- (1) **instr** — A message appears: Please Call Your Instructor. The keyboard locks until instructor types: unlock. The student re-tries the question.
- (2) **answer** — The student is given the correct answers to all matching items.
- (3) **none** — No assistance is given. The student is branched to an author specified remediation type unit.

The author specifies two branching units:

- (1) The unit the student will go to if he gets the entire matching problem correct.
- (2) The unit he goes to if the attempt limit is reached and he still has one or more incorrect matches. This can be a remediation type unit or it could be the same unit as the one he goes to if he answers them all correctly.

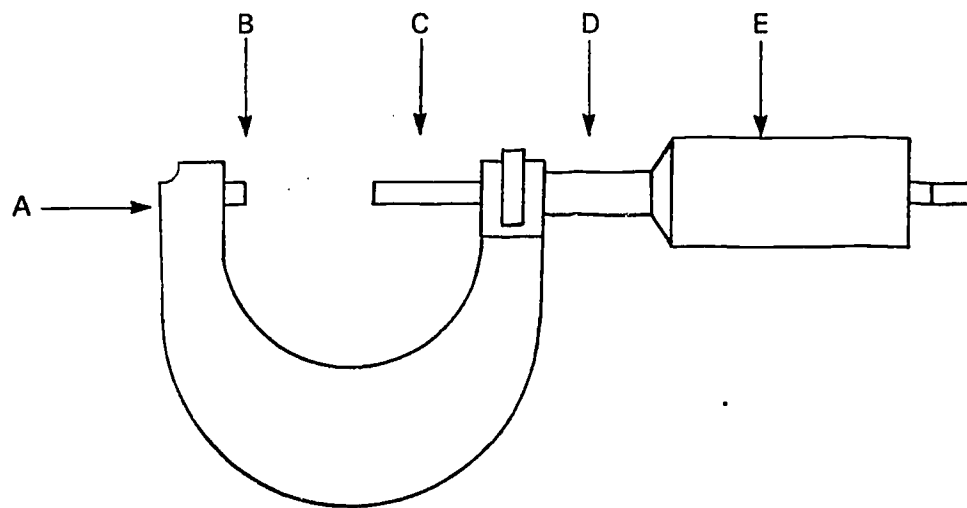
The author is permitted to have a maximum of 10 matching items. These are entered in "ID" Mode.



When you are writing your matching question (in ID Mode) you may have single, double, or triple spacing between matching items.

You may use graphic displays in your matching question as shown in the example below.

EXAMPLE:



Match the parts of the micrometer shown above.  
Type the appropriate letters below.

- 1. barrel
- 2. frame
- 3. thimble
- 4. spindle
- 5. anvil

The student is permitted to answer the individual matching items in any order that he chooses. He may use the NEXT key to advance the arrow to a new item, or he may use the BACK key to backup the arrow.

The student may change his answer to any matching item by repositioning the arrow with the NEXT and BACK keys and then entering a new response.

Each time the student has completed the entire matching problem he is informed of the specific items he has matched incorrectly. He then re-tries these items.

This option permits you to designate the type of assistance the student will receive if his answers are still incorrect after he reaches the number of attempts that you have specified (for notries).

There are three types of assistance available:

- (1) instr — A message appears: Please Call Your Instructor. The keyboard locks until instructor types unlock. The student re-tries the question.
- (2) answer — The student is given the correct answers for incorrectly matched items.
- (3) none — No assistance is given. The student is branched to an author specified remediation type unit.

## **How to use MONIFORMS**



## **HOW TO USE MONIFORMS**

**There are 6 Steps that must be completed to use HumRRO MONIFORMS.**

**After you have completed your first MONIFORM, we feel that you will rarely have to refer to this section of the lesson again.**



In the 6 Steps that follow we have included, where appropriate, reference to sections in the Main Index which provide additional assistance in completing the particular step.

Read through the entire 6 Steps. Then, if you have any questions about a particular Step, refer to the referenced material in the Main Index.

### Step 1

- a. Select the specific MONIFORM you wish to use.
- b. Be certain you are familiar with its characteristics. You may be expecting something from the MONIFORM it was not designed to provide.

ASSISTANCE AVAILABLE FROM MAIN INDEX
MONIFORM Characteristics
Sample Questions

## **Step 2**

After selecting the MONIFORM you plan to use, PLEASE leave a personal note providing the following information:

- (1) MONIFORM being used
- (2) Date

The above information is important for the following reasons:

- (1) It gives us a guide as to which MONIFORMS are being used and thus where we should place our emphasis in MONIFORM development.
- (2) It will permit us to contact you should a "bug" be discovered in the MONIFORM. (We don't expect this to happen because each MONIFORM is carefully debugged before release.)

**Address note to:**

re schulz—course: hum

### **Step 3**

- a. Copy Unit "setup" into your lesson ONE TIME ONLY.  
Unit "setup" should be in your lesson only once regardless of how many MONIFORMS you have used.
- b. Copy the selected MONIFORM into your lesson.

**Note: Unit "setup" and all MONIFORMS are located in lesson "hum8" which must be entered in AUTHOR MODE.**

#### Step 4

Revise Unit "setup" as directed by the instructions that follow the \$\$.

- a. Be certain PLATO executes Unit "setup" before it reaches the first MONIFORM.
- b. MONIFORMS use student variables for execution (sometimes as many as 72). We always begin with v50 (e.g., v50-v121). You may change the variable you begin with by changing the value of "offset" in Unit "setup".
- c. Be certain you have included all necessary -use- commands.

ASSISTANCE AVAILABLE FROM MAIN INDEX
Unit "setup"
Variables Used

### Step 5

Revise the MONIFORM as directed by the instructions following the \$\$.

- a. Most revisions can be made while in "replace" mode.
- b. "r" means replace.
- c. "add" means to add the requested information immediately after the final comma, the <, or the >.
- d. "Copy as is" means to copy everything except the \$\$ and the instructions that follow the \$\$.

ASSISTANCE AVAILABLE FROM MAIN INDEX
Completed MONIFORMS
Assistance with Code Completion

### **Step 6**

**Try your question in student mode to see if it executes properly.**

<b>ASSISTANCE AVAILABLE FROM MAIN INDEX</b>
<b>Debugging Your Question</b>
<b>Assistance With Code Completion</b>
<b>Completed MONIFORMS</b>
<b>Variables Used</b>
<b>Unit "setup"</b>
<b>HumRRO Drive Units Used</b>

## SUMMARY

Step	Reference in Main Index
1. Select MONIFORM and know characteristics	MONIFORM Characteristics Sample Questions
2. Leave personal note to: re schulz—course: hum	
3. Copy Unit "setup" and MONIFORM into your lesson from hum8	
4. Revise Unit "setup"	Unit "setup" Variables Used
5. Revise MONIFORM	Completed MONIFORMS Assistance With Code Completion
6. Try question in student mode	Debugging Your Question Assistance With Code Completion Completed MONIFORMS Variables Used Unit "setup" HumRRO Drive Units Used



## **Unit "Setup"**

**G**

**121**

## UNIT SETUP

It is important that you understand the characteristics of Unit "setup" inasmuch as it is the heart of the MONIFORM concept. It is the unit that permits you to use HumRRO code for execution of your MONIFORM questions.

### Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

Unit "setup" is located in lesson hum8. It is the unit that allows you to use HumRRO code for question execution without the need for you to copy the code into your lesson space.

### Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

Unit "setup" should be copied into your lesson ONLY ONE TIME.  
It must come before use of any MONIFORM.

### Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

Look at the entry "offset" in Unit "setup". Offset is now set at 50. This means that the sequence of student variables used in the MONIFORM for question execution will begin with v50. If you want to begin with some other student variable change "50" to the number you wish to begin with. Keep in mind, however, that if the MONIFORM you wish to use requires 68 student variables, offset cannot be set at greater than 82. (This would mean you were using variables v82-v150.) See page H-1 to find out the number of variables used with each MONIFORM.

## Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

You will also notice in Unit "setup" several -use- commands. Each of these indicates the HumRRO block in hum9 needed for execution of specific MONIFORMS (i.e., shown after the double dollar sign (\$\$)). To decrease the amount of ecs you use place a star before any -use- command in which that block of HumRRO coding is not needed for the questions used in your lessons. (Do not delete inasmuch as you may use these -use- commands for later MONIFORMS.)

### Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

If you have a -use- command someplace in your lesson other than in Unit "setup", read the remainder of this section.

If you do not have a -use- command elsewhere in your lesson return to the Main Index.

### Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

DO NOT USE this procedure unless you have previously  
used a -use- command elsewhere in your lesson.



### Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

You may copy HumRRO "drive units" directly into your lesson from lesson hum9 (author mode). Pages I-3 and I-4 indicate the specific drive units used with each MONIFORM. All of the code necessary for question execution will thus reside in your lesson space rather than in HumRRO lesson space. This procedure, however, reduces somewhat the value of MONIFORMS.

### Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

If you copy the HumRRO "drive units" into your lesson,  
change Unit "setup" by deleting all lines beginning  
with the -use- command.

### Unit Setup

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE: Place a star (*) in front of any -use- statement,		
*below, not necessary for execution of the MONIFORM(S)		
*you are using in your lesson. This will save you ecs.		
*(Do not delete since you may use them in later MONIFORMS.)		
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

---

Turn to page I-1 for a listing of HumRRO "drive units" used with each MONIFORM.

## **Student Variables Used With MONIFORMS**



## STUDENT VARIABLES USED WITH MONIFORMS

<u>MONIFORM</u>	<u># VARIABLES USED</u>	<u>NOW SET AT*</u>
1	68	v50-v117
2	68	v50-v117
3	72	v50-v121
4	76	v50-v125
5	68	v50-v117
6	72	v50-v121
7	88	v50-v137
8	85	v50-v134
9	13	v50-v62

\*All HumRRO MONIFORMS are now set to use student variables beginning with v50 (e.g., v50 thru v(# of variables +49)).

You may change the variable you start with by changing the value of "offset" in your copy of Unit "setup".

For example, if you wanted to use variables v1-v67 in MONIFORM1 rather than v50-v117 you would have in Unit "setup": offset = 1.

## **HumRRO Drive Units Used**

**134**

## **HumRRO DRIVE UNITS USED FOR MONIFORM EXECUTION**

Information about HumRRO "drive units" used for MONIFORM execution is needed ONLY by individuals who have used a -use- command in their lesson someplace other than in Unit "setup".

If you are already using a -use- command in your lesson (PLATO allows you to use only one additional lesson) it will be necessary for you to copy the specific HumRRO "drive units" necessary for MONIFORM execution into your lesson.

HumRRO "drive units" are located in lesson hum9. Contact Russel E. Schulz for assistance in copying the "drive units" into your lesson.



HumRRO lesson hum9 block location is shown in parentheses.

MONIFORM1

definea (definea)  
drive1 (drivec)  
drive2 (drivec)  
drive3 (drivec)  
drive4 (drivec)  
drive5 (drivec)  
drive6 (drivec)  
drive10 (drived)  
drive11 (drived)  
drive12 (drived)

MONIFORM2

definea (definea)  
drive1a (drivec)  
drive3 (drivec)  
drive4 (drivec)  
drive5 (drivec)  
drive6 (drivec)  
drive10 (drived)  
drive11 (drived)  
drive12 (drived)

MONIFORM3

definea (definea)  
drive1 (drivec)  
drive2 (drivec)  
drive3 (drivec)  
drive5 (drivec)  
drive6 (drivec)  
drive7 (drived)  
drive8 (drived)  
drive9 (drived)  
drive11 (drived)  
drive13 (drived)  
drive13a (drived)

MONIFORM4

definea (definea)  
drive1a (drivec)  
drive3 (drivec)  
drive5 (drivec)  
drive6 (drivec)  
drive7 (drived)  
drive8 (drived)  
drive9 (drived)  
drive11 (drived)  
drive13 (drived)  
drive13c (drived)

HumRRO lesson hum9 block location is shown in parentheses.

MONIFORM5

definea (definea)  
drive3 (drivec)  
drive5 (drivec)  
drive6 (drivec)  
drive14 (drived)  
drive15 (drived)  
drive16 (drived)

MONIFORM6

definea (definea)  
drive3 (drivec)  
drive5 (drivec)  
drive6 (drivec)  
drive14 (drived)  
drive16 (drived)  
drive17 (drived)

MONIFORM7

definea (definea)  
drive3 (drivec)  
drive5 (drivec)  
drive6 (drivec)  
drive14 (drived)  
drive16 (drived)  
drive18 (drived)

MONIFORM8

definea (definea)  
drive19 (drivee)  
drive20 (drivee)  
drive21 (drivee)  
drive22 (drivee)  
drive23 (drivee)  
drive24 (drivef)  
drive25 (drivef)  
drive26 (drivef)  
drive27 (drivef)  
drive28 (drivef)  
drive29 (driveg)

MONIFORM9

definea (definea)  
drive5 (drivec)  
drive30 (driveg)  
drive31 (driveg)  
drive32 (driveg)  
drive33 (driveg)  
drive34 (driveg)  
drive35 (driveg)  
drive36 (driveg)  
drive37 (driveg)

## **Assistance in MONIFORM Completion**

**139**



## **ASSISTANCE IN MONIFORM COMPLETION**

In some instances the instructions that follow the \$\$ in MONIFORMS are not sufficiently clear for all individuals.

This section provides a list of MONIFORM coding lines. The user may reference this list to obtain additional assistance in completing his MONIFORM.

Generally, it is not necessary to examine this section unless you are having difficulty in completing a specific MONIFORM.

Page		
J-3	(alt1,wrong)	
J-4	answ ⇐	
J-5	assist ⇐	
J-6	calc	arrow1 ⇐
J-7	calc	lines ⇐
J-8	calc	nodist ⇐
J-9	calc	ntaf ⇐
J-10	calc	pos ⇐
J-11	calc	posA ⇐
J-12	(catext,zzzz)	
J-13	concept alt1	(thru alt5)
J-14	jump	rightT=noalt,nextu,review,
J-15	long1 ⇐	
J-16	noalt ⇐	
J-17	notries ⇐	
J-18	next	nextu
J-19	nextnow	remed > 0,otheru,x,
J-20	nextnow	remed = 0,x, otheru,
J-21	pack	temp,alt1, (thru temp,alt6)
J-22	pack	temp,caf
J-23	pack	temp,catext,
J-24	pack	temp,dist1, (thru temp,dist5)
J-25	pack	temp,match1, (thru temp,match9,)
J-26	pack	temp,waf, (thru temp,waf4)
J-27	pack	temp2,caf1,
J-28	pack	temp2,n(offset + 1),
J-29	pos ⇐	(as used in MONIFORM8 only)
J-30	posB ⇐	
J-31	space ⇐	
J-32	specs	\$\$
J-33	vocabs	form5 (6 or 7)
J-34	< zz,zz,zz >	

(alt1,wrong1)	\$\$ r wrong1 with incorrect answer 1
(alt2,wrong2)	\$\$ r wrong2 with incorrect answer 2
(alt3,wrong3)	\$\$ r wrong3 with incorrect answer 3
(alt4,wrong4)	\$\$ r wrong4 with incorrect answer 4
(alt5,wrong5)	\$\$ r wrong5 with incorrect answer 5

---

"r" means replace.

You may specify as many as 5 specific wrong answers for which you will give specific feedbacks.

In the code above you replace wrong1, wrong2, etc. with the specific "incorrect" answers. They can consist of single words, phrases, or synonymous words or phrases.

Since this MONIFORM uses the -vocabs- command, the way the wrong answer is coded is different from that of the -wrong- command. NOTE the following examples carefully.

#### EXAMPLES

(alt1,wronganswer)

Wrong answer: wronganswer

(alt2,wrong\*answer)

Wrong answer: wrong answer

(alt3,Alexandria\*Virginia,Alexandria\*Va)

Wrong answer: Alexandria, Virginia or Alexandria, Va.

(alt4,4\*th\*of\*July,Fourth\*of\*July)

Wrong answer: 4th of July or Fourth of July

answ ⇐      \$\$ add the # of the alternative which  
                  \$\$ is the correct answer

---

You were instructed earlier in the MONIFORM to provide 2-6 answer alternatives, one of which was to be the correct answer. Since you specify the order in which the answer alternatives are presented to the student, PLATO must be told which answer alternative is the correct answer. You add it immediately after the arrow.

Your entry must be a number between 1 and 6.

#### EXAMPLE

answ ⇐ 3      (The 3rd answer alternative that you wrote  
                  is the correct answer.)

assist ⇐ \$\$ add: instr—for instructor assistance OR  
\$\$ add: answer-answer given; OR add: none

---

This option permits you to designate what type of assistance the student will receive if he is still incorrect after the number of attempts that you have specified (for notries) is reached.

#### EXAMPLE

- (1) assist ⇐ instr  
After the  $n^{\text{th}}$  try student receives message  
“Please Call Your Instructor”. Keyboard is locked  
until instructor gives assistance and types: unlock.
- (2) assist ⇐ answer  
After the  $n^{\text{th}}$  incorrect try the correct answer is  
given to the student and he is branched to another  
author specified unit. (This unit may be used to  
provide remediation instruction, or it could be  
the same unit he would go to if he answered the  
question correctly.)
- (3) assist ⇐ none  
No assistance is given the student. He is just  
branched to another author specified unit.



calc    arrow1←        \$\$ add position for first arrow

---

In this MONIFORM the arrow is used for two purposes: (1) as a place for the student's answer, and (2) to mark the matching item that he is currently working on. You must therefore determine the screen position of the first matching item and then subtract 5 from this value. This is the value you add immediately after the arrow. NOTE: The screen position you add must be greater than 5 (e.g., 1806) to allow for presentation of correct answers and "no" feedback.

#### EXAMPLE

- ↓ This is screen position 1815
- 1.   Matching item 1        a.   answer 2  
      2.   Matching item 2        b.   answer 4  
      3.   Matching item 3        c.   answer 1  
      4.   Matching item 4        d.   answer 3

In this example -arrow1- is therefore set at: 1810  
(1815 - 5 = 1810) The arrow will then be presented at  
the ➤, as shown. (e.g., calc    arrow1← 1810)

**calc    lines ⤵            \$\$ add # question lines used**

---

In MONIFORMS that use this line of code you have been instructed to write 1-4 lines of question text. (In the case of Multiple Choice questions this does not include answer alternatives.) Inasmuch as you may not require the full 4 lines for asking your question, PLATO needs to know how many lines you actually required. You add this number immediately after the ⤵ .

**EXAMPLE**

**calc            lines⤵ 3        (indicating you used 3 lines of  
question text)**

calc    nodist ⇐      \$\$ add # distractors used  
OR  
calc    nodist ⇐      \$\$ add # alternatives used

Earlier in the MONIFORM you were instructed to write 1-5 distractors (MONIFORMS1 and 3) or 1-6 answer alternatives (MONIFORMS2 and 4). PLATO needs to know exactly how many you actually wrote. Add this number immediately after the ↵.

### EXAMPLE

**calc    nodist= 4    (This means you wrote 4 distractors/  
alternatives.)**

calc      ntaf ⇐      \$\$ add # of try again feedbacks used

OR

calc      ntaf ⇐      \$\$ add # of general feedbacks used

---

#### MONIFORMS1,2, and 5

Earlier in the MONIFORM you were asked to write text for 1-4 try again feedbacks (general incorrect answer messages). PLATO needs to know the actual number that you wrote. Add the number written immediately after the ⇐ .

#### MONIFORM7

In this MONIFORM you were asked to write text for general (not response specific) feedbacks. Again, PLATO needs to know the actual number written. Add the number written immediately after the ⇐ .

#### EXAMPLE

calc      ntaf ⇐ 2      (meaning 2 try again feedbacks, or  
2 general feedbacks were written)

calc      pos ↵      \$\$ add screen pos. to begin question

---

Within certain restrictions you may have your question appear any place that you wish on the screen. Add the screen position that you wish to have as the starting point for your question immediately after the ↵ .

NOTE: Be certain that you do not specify a position so low on the screen that there will not be enough room for your question and any feedbacks that the student might receive.

Inasmuch as the feedbacks that you provide may be 40 characters in length (and limited to one line) be certain that you do not begin your question too far to the right of the screen.

#### EXAMPLE

calc      pos ↵ 1010      (Your question would begin at line 10,  
character position 10.)

calc      posA ⇐      \$\$ add screen position of first  
   \$\$ match question

---

In this MONIFORM two columns are required which we arbitrarily designate as Column A and Column B below (you need not label them). Column A is a list of the match questions, and Column B is a list of answer alternatives.

The arrow indicating which match question the student is working on appears a few spaces to the right of Column A entries. PLATO needs to know where your Column A entries begin. Therefore, enter the screen position immediately after the ➤ for the beginning screen position of match question 1.

#### EXAMPLE

— This is screen position 1815

	<u>Column A</u>	<u>Column B</u>
➤	1. Match question 1	Answer 3
	2. Match question 2	Answer 1
	3. Match question 3	Answer 2

calc      posA ⇐ 1815      (In this example the first arrow  
   would appear as shown by the ➤.)

(context,zzzz) \$\$ r zz's with correct answer

---

The correct answer can be a single word, a phrase, or synonymous words or phrases. Replace the "zz's" with your correct answer. Separate synonymous words or phrases with commas (,). Separate words in a phrase with stars (\*).

Since this MONIFORM uses the -vocabs- command, the way the correct answer is coded is different from that of the -answer- command. NOTE the following examples carefully.

#### EXAMPLES

(context,rightanswer)

Answer: rightanswer

(context,right\*answer)

Answer: right answer

(context,Alexandria\*Virginia,Alexandria\*Va)

Answer: Alexandria, Virginia or Alexandria, Va.

(context,4\*th\*of\*July,Fourth\*of\*July)

Answer: 4th of July or Fourth of July

concept alt1	\$\$ copy as is (delete if not used)
concept alt2	\$\$ copy as is (delete if not used)
concept alt3	\$\$ copy as is (delete if not used)
concept alt4	\$\$ copy as is (delete if not used)
concept alt5	\$\$ copy as is (delete if not used)

---

Earlier in the MONIFORM you specified 1 to 5 specific wrong answers: (alt1,wrong1); (alt2,wrong2); etc.

If you specified fewer than 5, it is important that you delete any of the lines of coding above that do not correspond to a specific wrong answer.





long1 ⇐ \$\$ add 1 for immed. judging (long1); add 0  
\$\$ if S must 1st press next to judge answ.

---

You have the option of having judging of the student's answer begin immediately after he has entered a single character, or having judging begin only after he enters an answer and presses NEXT.

#### EXAMPLES

long1 ⇐ 1 (Judging begins as soon as single character is entered.)

long1 ⇐ 0 (Judging begins only after answer is entered and student presses NEXT.)

noalt ⇐ \$\$ add # match questions used

---

In MONIFORM8 you are permitted to write as many as 9 match questions (items), while in MONIFORM9 you may write as many as 10. PLATO needs to know the actual number you wrote. Add this number immediately after the ⇐.

#### EXAMPLE

noalt ⇐ 7 (indicates you wrote 7 match questions/items)

notries ← \$\$ add. # attempts student permitted

---

The number you add after the ← indicates the number of attempts at the question you wish the student to have.

#### EXAMPLE

notries ← 3 (student permitted 3 attempts.) NOTE:  
If you are using MONIFORMS in which students are given general feedbacks, in this example you would need to write only 2 feedbacks. The student would not see additional ones because of the limitation on attempts permitted.

next      nextu      \$\$ r nextu with unit name S goes to  
 \_\_\_\_\_      \$\$ if he gives correct answer

**"r" means replace.**

Replace "nextu" with the name of the unit you wish the student to be branched to if he answers the question correctly.

### EXAMPLE

```
next coransw (coransw is a unit name)
```



```
nextnow remed = 0,x,otheru,    $$ r "otheru" with unit S  
                                $$ goes if answ given him
```

---

"r" means replace.

You have earlier specified the number of attempts that you wish the student to have at the question. If he is still incorrect after he has reached this limit you may have specified that he be given the correct answer and then branched to another unit.

Therefore, replace "otheru" with the unit you wish him branched to. (It can, of course, be the same unit that you branch him to if he gets the question correct.)

NOTE: If you have elected to have the instructor called (i.e., assist ⇐ instr) rather than giving him the correct answer, you may replace "otheru" with "x" or delete the entire line of code.

#### EXAMPLE

```
nextnow    remed = 0,x,helpu,
```

pack	temp,alt1,	\$\$ add answer alternative 1
pack	temp,alt2,	\$\$ add answer alternative 2
pack	temp,alt3,	\$\$ add answer alternative 3
pack	temp,alt4,	\$\$ add answer alternative 4
pack	temp,alt5,	\$\$ add answer alternative 5
pack	temp,alt6,	\$\$ add answer alternative 6

---

You may have as many as 6 answer alternatives in your question. They will appear on the screen in the order that you have written them (i.e., alternative 1 will be first, etc).

One of the answer alternatives must be the correct answer.

Answer alternatives are limited to 40 characters (shifted characters count as 2).

Leave blank (or delete) any lines of code not needed for answer alternatives.

#### EXAMPLE

Don't forget this comma  
↓

pack	temp,alt1,alternative 1	
pack	temp,alt2,alternative 2	
pack	temp,alt3,alternative 3	(correct answer)
pack	temp,alt4,alternative 4	
pack	temp,alt5,	(not used)
pack	temp,alt6,	(not used)



pack          temp,caf,          \$\$ add correct answer feedback

You may give the student a congratulatory message (feedback) if he gets the question entirely correct.

This message is limited to 40 characters (shifted characters count as 2). It is written immediately after the final comma. (Don't forget the comma.)

EXAMPLE

pack          temp,caf,Congratulations! You are correct.

pack          temp,catext,      \$\$ add text for correct answer alt  
OR  
pack          temp,catext,      \$\$ add correct answer (only one)

---

The material that you add after the comma in the code above is used in two ways, depending upon the MONIFORM you are completing. It is limited to 40 characters (shifted characters count as 2).

#### MONIFORMS2, 4, 5, 6, 7

Used only as feedback in those cases where the author has specified that the student be given the correct answer after reaching attempt limit specified.

#### MONIFORMS1 and 3

In MONIFORMS1 and 3 answer alternatives (distractors and the correct answer) are packed into variables so that they may be presented later to the student in random order. In this case, you are adding the correct answer alternative after the final comma.

Also used as feedback to give the student the correct answer.

#### EXAMPLE

pack          temp,catext, (correct answer)

pack	temp,dist1,	\$\$ add text for distractor 1
pack	temp,dist2,	\$\$ add text for distractor 2
pack	temp,dist3,	\$\$ add text for distractor 3
pack	temp,dist4,	\$\$ add text for distractor 4
pack	temp,dist5,	\$\$ add text for distractor 5

---

You are permitted 1-5 distractors (wrong answer alternatives) in your question. Add them after the final comma in your code. They are limited to 40 characters (shifted characters count as 2). Don't be concerned with their order inasmuch as they will be presented to the student in random order.

If you do not require all 5 distractors in your question leave any unneeded ones blank after the final comma. (Or you may delete them.)

#### EXAMPLE

pack	temp,dist1,wrong answer alternative a
pack	temp,dist2,wrong answer alternative b
pack	temp,dist3,wrong answer alternative c
pack	temp,dist4, (not needed)
pack	temp,dist5, (not needed)

pack	temp,match1,	\$\$ add match answer item 1
pack	temp,match2,	\$\$ add match answer item 2
pack	temp,match3,	\$\$ add match answer item 3
pack	temp,match4,	\$\$ add match answer item 4
pack	temp,match5,	\$\$ add match answer item 5
pack	temp,match6,	\$\$ add match answer item 6
pack	temp,match7,	\$\$ add match answer item 7
pack	temp,match8,	\$\$ add match answer item 8
pack	temp,match9,	\$\$ add match answer item 9

---

You may have as many as 9 matching items (answer alternatives). Add the text for these items after the final comma. Each item is limited to 40 characters (shifted characters count as 2). Don't be concerned about order since they are presented in random order.

If you have fewer than 9 matching items leave blank after final comma (or delete).

#### EXAMPLE

pack	temp,match1,answer 1	
pack	temp,match2,answer 2	
pack	temp,match3,answer 3	
pack	temp,match4,answer 4	
pack	temp,match5,answer 5	
pack	temp,match6,	(not used)
pack	temp,match7,	(not used)
pack	temp,match8,	(not used)
pack	temp,match9,	(not used)

pack temp,waf, \$\$ add fdback—"general" wrong answer

OR

pack temp,waf, \$\$ add general feedback 1

pack temp,waf2, \$\$ add general feedback 2

pack temp,waf3, \$\$ add general feedback 3

pack temp,waf4, \$\$ add general feedback 4

---

**MONIFORM6**—In this MONIFORM you may give only 1 general feedback for unanticipated wrong answers. This feedback is limited to 40 characters (shifted characters count as 2).

**MONIFORM7**—In this MONIFORM you may give a maximum of 4 general feedbacks for unanticipated wrong answers. The student will receive feedback 1 the first time he gives an unanticipated wrong answer, feedback 2 for the second unanticipated wrong answer, etc. Again, feedbacks are limited to 40 characters where shifted characters count as 2. Leave blank (or delete) any lines not needed.

#### EXAMPLE

pack temp,waf,1st unanticipated answer feedback  
pack temp,waf2,2nd unanticipated answer feedback  
pack temp,waf3,3rd unanticipated answer feedback  
pack temp,waf4, (not needed)

**pack      temp2,caf1,    \$\$ add correct answer feedback**

---

**You may give the student a congratulatory message (feedback) if he gets the question entirely correct.**

**This message is limited to 40 characters (shifted characters count as 2). It is written immediately after the final comma. (Don't forget the comma.)**

**EXAMPLE**

**pack      temp,caf1,Great! You got it correct.**

pack      temp2,n(offset+1), \$\$ add correct answ string

You have written a maximum of 10 matching items (questions) and have presumably scrambled the answers. This line of coding tells PLATO what the order of the correct answers is (i.e., matching item 1 is answer c; item 2 is answer a; etc.). See the examples below for the method of signifying the correct answer string.

#### EXAMPLES

Make the matches below:

- |               |              |
|---------------|--------------|
| 1. Water      | a. Metal     |
| 2. Iron       | b. Fluid     |
| 3. Table salt | c. Vegetable |
| 4. Pumpkin    | d. Mineral   |

#### Correct method of completing code

pack      temp2,n(offset + 1),badc

#### Incorrect methods of completing code

pack      temp2,n(offset+1),b,a,d,c    (should not have  
commas between  
letters)

pack      temp2,n(offset+1),b a d c    (should not have  
spaces between  
letters)

pos ←      \$\$ add line # for feedbacks to begin  
                 \$\$ (no greater than 28)

---

In this MONIFORM, "pos" is used to designate the line on the screen (e.g., line 26) where you want any feedbacks that the student receives written. Do not specify a line greater than 28 inasmuch as lines below 28 are reserved for instructions.

#### EXAMPLE

pos ← 26      (All feedbacks in this example would be presented on line 26 of the screen.)



```
calc      posB←      $$ add screen position for first
                        $$ match answer
```

---

In this MONIFORM two columns are required which we arbitrarily designate as Column A and Column B below. (You need not label them.) Column A is a list of the match questions, and Column B is a list of answer alternatives.

In this line of code you are specifying the screen position where you want the Column B items (match answers) to begin. Make certain there is enough room for them to fit on the screen.

#### EXAMPLE

This is screen position 2241

<u>Column A</u>	<u>Column B</u>
1. Match question 1	Match answer 3
2. Match question 2	Match answer 1
3. Match question 3	Match answer 2

```
calc      posB ← 2241      (in this example)
```

space ⇐      \$\$ add # lines between match items

---

You have the option of having single, double, or triple spacing between match items. So that PLATO will know how many lines to move the arrow after each time, you must indicate the number of lines between the items.

#### EXAMPLES

(1) Match item 1  
Match item 2      space ⇐ 1  
Match item 3  
Match item 4

(2) Match item 1  
  
Match item 2  
space ⇐ 2  
Match item 3  
  
Match item 4

specs      \$\$                      \$\$ r first \$\$ with desired specs

---

"r" means replace.

You have the option of having any "specs" that you wish used for judging the student's answer. You replace the first set of \$\$ with the "specs" you want (separated by commas).

NOTE: These MONIFORMS use the -concept- command for execution. Not all "specs" work with the -concept- command. Only the "specs" listed will work:

best  
bumpshift  
nomark  
nookno  
noorder  
okcap  
okspell  
okxvocab

} See Lesson AIDS  
for explanation.

#### EXAMPLE

specs      nomark,nookno,noorder,okspell,

vocabs	form5	\$\$ r form5 with your unit name
vocabs	form6	\$\$ r form6 with your unit name
vocabs	form7	\$\$ r form7 with your unit name

---

"r" means replace.

In all of the above coding lines you must replace  
form (5,6, or 7) with the unit name you assigned  
this constructed response question.

#### EXAMPLE

```
unit      myname
.
.
.
.
.
.
vocabs    myname
```

< zz,zz,zz >

\$\$ r zz's with optional words

---

"r" means replace.

You may designate optional words that will be disregarded in judging the student's answer.  
Replace the "zz,zz,zz" with these optional words.

NOTE: When the -vocabs- command is used for judging the student's answer, optional words will not be disregarded if they come in the middle of words in an answer phrase (e.g., Alexandria is the city in Virginia). If "is,the,city,in" were designated as optional words, PLATO would not disregard them if the correct answer was "Alexandria Virginia). Therefore, optional words to be disregarded must come before or after the correct answer.

EXAMPLE:

< it,is,the,city >

## **Debugging Your Question**

**K**  
7

## **DEBUGGING YOUR QUESTION**

You can always receive assistance in debugging your question by contacting Russel E. Schulz in the talk option or by leaving a personal note. Use the following:

Code name: re schulz

Course: hum

You may also find the comments on the following pages helpful in debugging your question.

You may find it helpful to look at an example of a question prepared with the MONIFORM you have selected. If so, turn to page B-1.

You may also find it helpful to examine an accurately completed MONIFORM for the sample question. If so, turn to page C-1.

Or, turn to the next page for a troubleshooting list that may solve your problem.



1. Are you completely familiar with the characteristics of the MONIFORM you are using? You may be expecting something from it that it was not designed to give.
2. Check to make certain that Unit "setup" has been copied into your lesson only once and that the following are correct:
  - a. PLATO is executing Unit "setup" before it reaches your question.
  - b. All of the necessary -use- commands needed for your question to execute have been included in "setup".
  - c. If you have changed the value of "offset", check to be certain that you have not exceeded the permissible range of student variables (i.e., if your MONIFORM requires 75 variables, "offset" must be no greater than "76"). Otherwise you would be trying to use variables greater than 150.

3. If feedbacks or answer alternatives are not appearing as they should, check the following:
  - a. If a feedback doesn't appear at all:
    - (1) Check to be certain that you have not omitted the final comma in the -pack- statements (i.e., the one just before your feedback).
    - (2) If feedbacks are "general" you will not receive them unless you have specified enough attempts at the question for them to be used (e.g., if you permit only 2 tries at the question, only one (the first) general feedback will ever be used).
  - b. If feedback is "chopped" off in the middle you have probably exceeded the 40 character limit. (Shifted characters count as 2.)
  - c. If feedbacks are appearing at "funny" places on the screen you have probably set the value of the initial screen position (where your question starts) too low on the screen, or too far to the right.

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